DECEMBER 1946

FIREMEN

FIFTIETH ANNIVERSARY YEAR • NATIONAL FIRE PROTECTION ASSOCIATION

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REGISTERED

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TAPERED STILL THPEADS

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AKRON BRASS

FIRE FIGHTING EQUIPMENT

"I got my INDIAN FIRE PUMP *and in no time at all I had the fire out"*

reports

A. G. PRESTON

A. G. PRESTON

HERE IS MR. PRESTON'S LETTER

D. B. Smith & Co., Utica, N. Y.

Today sitting at my desk, I glanced out and saw smoke coming from the hood of an auto parked in front of my building. I rushed out and a man and woman had gotten out of the car and raised the hood. A nice flame had developed.

I rushed back in my store and got one of your **INDIAN FIRE PUMPS** and in no time at all had the fire out before the fire department arrived.

I bought these **INDIAN FIRE PUMPS** three years ago and they have been standing filled with water but never used until today — they worked perfectly. The owners of the car were pleased and amazed to see what a fine job the **INDIAN FIRE PUMP** did.

Yours very truly,

A. G. PRESTON.

Patented

We strive to keep a watchful eye on the future and develop improvements in our INDIAN FIRE PUMPS that will make them continue to stand out all alone as the best fire pumps obtainable.

Here's a time when someone beat the fire department to the punch. Every day brings new uses for these great fire fighters. How is **your** department fixed for **INDIAN FIRE PUMPS?** Have you plenty? Remember clear water alone does the job.

NOZZLE IS ADJUSTABLE

The No. 147 nozzle of an* INDIAN FIRE PUMP *is adjustable to throw 30 to 50 feet straight pressure stream, course spray or fog mist spray — whatever is necessary. Five gallon tank carries slung on the back like a pack basket leaving arms free.

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The fire engine more than paid for itself today!

According to Chief Kirby MacKinnon, this remark was commonly heard in Amboy, Illinois, the day this Mack handled a big farm fire on the edge of town.

A barn, 48' by 114', loaded with hay and straw, was struck by lightning and burning fast. 15' distant, the corn crib and other buildings ran east and south in straight lines. Changing winds threatened these buildings. Amboy's fire-fighters pumped from a creek by using a spray on one line and moved between the barn and crib to work a straight stream off another line onto the other buildings. Town people were amazed that the other buildings were saved!

Chief MacKinnon writes: ". . . the firemen have something (Mack) to work with, and can do a real job . . . We saved $50,000 by keeping the fire to the barn!"

Amboy's Mack is equipped with a two stage, pressure volume, centrifugal type pump—introduced by Mack—and a powerful six cylinder engine. Its ability to last longer and work harder has not been surpassed in 36 years!

Get the fire engine that offers your community the utmost in protection. Get the new Mack fire fighter. It pays for itself!

MACK MANUFACTURING CORPORATION, Fire Engine Dept., Empire State Bldg., New York 1, N. Y.

Mack
FIRE APPARATUS

Performance Counts!

Firemen

Volume 13 Number 12

WARREN Y. KIMBALL, EDITOR
ANNE BAILEY KELLER, ASSOCIATE EDITOR
CHARLES S. MORGAN, ADVERTISING MANAGER

Published monthly for the fire service members of the

NATIONAL FIRE PROTECTION ASSOCIATION

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60 BATTERYMARCH ST., BOSTON 10, MASS.

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HORATIO BOND, CHIEF ENGINEER

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THE cover picture (*Press Association, Inc.*) — a fire in the Rimmon Block in Manchester, N. H., on November 2, which rang up the cash register for a $750,000 loss. The men shown with that big line are really socking that fire but they didn't have a chance and before long were running from falling walls.

The old 420-foot long block was being remodeled at great expense. New fire doors were on hand but they didn't stop the rush of the fire — they hadn't been installed yet. Sprinklers, yes, they were on order, but that did not stop the fire a bit. In fact, in addition to the entire powerful Manchester Fire Department, Chief Aubrey Robinson had to call help from the cities of Nashua and Concord and from Grenier Field. The building had stores on the first floor, thirty offices on the second floor, and apartments housing one hundred persons on the two upper floors. One couple trapped on the roof had a very narrow escape as firemen braved flames to take them down a ladder that was four feet short of reaching the roof.

A fire captain was seriously burned when gasoline, being poured into a pumper from an open container, ignited. Only quick action by a nearby hose crew in shifting their stream prevented fatal results.

FIREMEN continue to pay with their lives because they are not given adequate training in the use of masks under conditions simulating those of actual fires. Many do not appreciate the danger of depending upon the so-called "all-service" and other filter-type smoke and gas masks in basement and other areas deficient in life sustaining oxygen no matter how excellent such masks may be as a protection against smoke and ordinary concentration of fire gases.

Masks are not worn frequently enough to familiarize each fireman thoroughly with their use. All too often masks are only employed *after* the fire fighters have found that they cannot "make the fire" without respiratory protection. This is a serious error. At best, the fireman is under a strain while wearing a mask. Men who are not already fatigued by heat and heavy exertion should be called upon to use the masks.

One point that must always be remembered is that heat perhaps more than smoke, weakens or debilitates the fire fighter. Even with the best of mask protection he is subject to severe strain while working in confined areas where heat may far exceed the 90 to 100 degree range of mid-summer.

It is recognized that firemen must get inside to extinguish fires and that masks often permit men to come within effective range of fires that otherwise might not be controlled. There is no longer justification for the old scene of ten, twenty, or more firemen stretched out on the sidewalk, overcome by smoke. That may be an indication that local fire department is considerably behind in providing modern, respiratory protection for every fire fighter who must work inside. The state labor law of Michigan requires approved respiratory equipment for paid fire fighters on the grounds that there is no more justification for a fireman to work in contaminated atmosphere without protection than there is for an industrial worker to do so.

Among types of masks that give protection in oxygen deficient atmospheres are: the fresh air mask by which the wearer receives air through a hose supplied by a blower outside the building; the so-called "Navy-type" canister mask developed during the war, in which oxygen is developed by the reaction of certain chemicals in the canister while the mask is being worn; the air-pack type of mask in which pure air is carried in a container under pressure and supplied to the wearer upon demand; and the oxygen mask in which oxygen is carried in a container.

In addition, there are the pre-war types of oxygen breathing apparatus commonly employed by the fire department rescue squads in large cities. These were considered to be special equipment that required carefully trained wearers and special attention. They were not made available to all fire fighting companies.

Now many excellent masks are available and should be provided for all fire companies. But such a program requires that every man receive thorough training. He should not be authorized to wear mask equipment of any sort, at fires, until he has actually worn the mask for a period of several hours while working in a smoke chamber and thoroughly has the "feel" of the equipment and confidence in it. Fire departments have the advice of the best experts in the field of respiratory protection. The U. S. Bureau of Mines is recognized as the agency giving approval for protective breathing apparatus. Masks should bear the Bureau's approval and should be used only under conditions for which use has been approved. Further, masks should receive frequent careful inspection and check-up. Canisters and air containers should be replaced or refilled promptly when there is doubt as to their condition, or after any substantial use.

MACK MANUFACTURING CORPORATION, Fire Engine Dept., Empire State Bldg., New York 1, N. Y.

Christmas Is Coming

Make it "Fireproof"

EVERYBODY, including the most flint-hearted Scrooge, looks forward to Christmas. But will everybody have happy memories of the 1946 holidays?

As soon as the first Christmas trees and lights appear in stores and homes, the fireman knows that one of the high-hazard seasons has begun. Thousands of persons will crowd into shopping districts; many stores will remain open and jammed until long after dark; merchants, in the rush to replenish their counters, will leave backrooms and alleys filled with combustible merchandise, rubbish and packing materials.

Christmas is also flammable-decoration time, and it seems that no number of holiday fire tragedies will automatically impress many home- and store-decorators that safeguards must be taken.

It is the fire department's job, not only to provide townspeople with many safety tips at this hazardous time of year, but to make certain that adequate fire prevention routines are maintained. Large city fire departments know the importance of patrolling alleys for combustible rubbish long hours after the weary shoppers are in their homes. Routine daily rubbish collections may be far from adequate and the fire department should insist that store owners maintain safer conditions, unobstructed exits, adequate first aid fire appliances, and proper arrangements for calling the fire department.

Perhaps recent years have not seen the great holiday fire tragedy in a large department store because most such stores are protected with automatic sprinklers and are under competent management that abhors fire. Also, most fire departments maintain strict vigilance where such hazards are concerned.

The fact that such tragedies have not occurred should not blind us to the dangers of crowded bargain basements, panic hazards where stairways and elevators are taxed to capacity, and the everpresent danger of tremendous amounts of combustible merchandise.

Much has been written about the hazards of Christmas trees. Many folks do not appreciate that thousands of these traditional ornaments are cut in distant forests frequently weeks ahead of the holiday. They travel to big city markets and to retail outlets before going into heated homes and apartments. All who have not done so should glance at the NFPA Christmas pamphlet, *Make This a Safe Christmas.** Proof of the seriousness of the Christmas tree hazards is found in the death of nineteen people in the Niles Street Hospital, Hartford, Conn., last Christmas Eve. Many other tragedies could be cited.

As a cause of individual fires, the Christmas tree hazard unfortunately does not end until the thousands of trees are safely disposed of after the holiday. One fire department, making a Fire Prevention Week inspection *ten months after Christmas*, found 500 Christmas trees in basements, awaiting disposal, or a spark to happen by.

Some communities have staged a New Year's bonfire by burning the thousands of trees in a public park. However, this too might have considerable elements of danger if weather conditions favored spread of flying brands to combustible roofs in the vicinity.

Perhaps for a pointed summary of the Christmas fire problem, it would be appropriate to quote the following open letter that appeared in the Earlville, Iowa, *Review:*

WHOSE HOUSE SHALL WE COME TO ON CHRISTMAS DAY?

"There are twenty-five of us, and when we come, we generally bring lots of the neighbors. As a rule, we leave things in pretty poor shape after our visit. Sometimes we chop holes in the wall, spill water on the rugs and furniture, even break the doors down, and we have been known to climb up on the roof and tear off the shingles.

Continued on page 12

**Obtainable from the Publications Department, National Fire Protection Association, 60 Batterymarch St., Boston 10, Mass., at $1.50 per hundred, $12.50 per thousand.*

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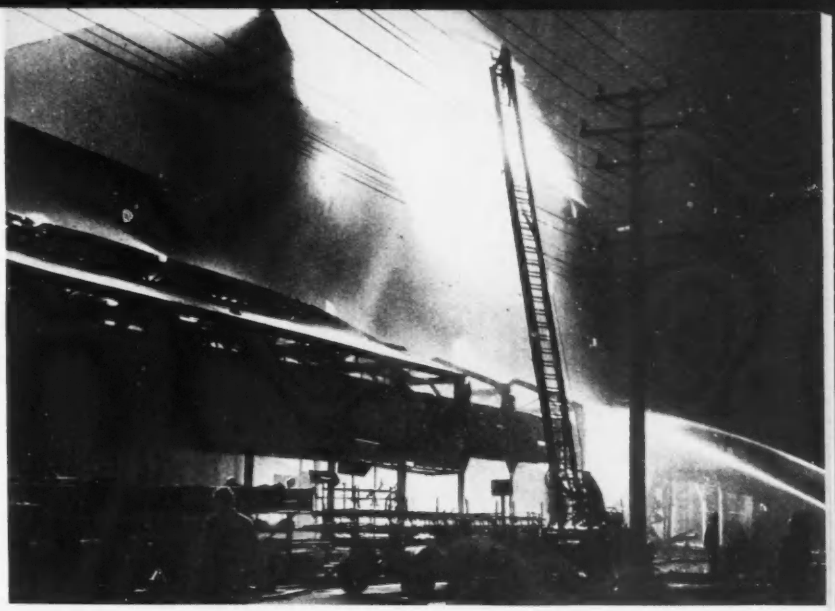
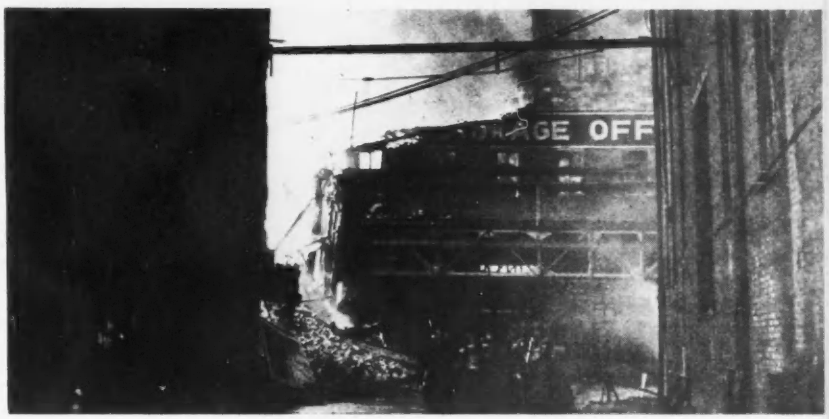
". . . and right in the middle of our Christmas party too."

Two major fires in as many days caused an estimated $1,000,000 loss to the North American Cold Storage Company in National City, Ill., on October 2 and 3. (See two upper right photos.) At 4:40 P.M. on Wednesday, October 2, fire was discovered in a pile of paper cartons on the first floor of one of the buildings. Help was immediately dispatched from the National City fire station 200 feet away. Although both East St. Louis, Ill., and St. Louis, Mo., sent equipment, three buildings were destroyed as water supplies were insufficient to supply pumpers.

Fire again broke out and destroyed another warehouse on Thursday at 7:30 P.M. It was the opinion of one of the chiefs at the fire that the second fire was caused by spontaneous ignition due to heat conducted through a fire wall to a pile of sacked alfalfa meal stored along the wall.





Press Association, Inc.

A general-alarm fire started in the 72-year-old Shove Mill in Fall River, Mass., on October 18 with a loss estimated at $1,000,000. (See photo above and at right.) The 5-story mill and 7-story granite tower were a total loss. The cause of the fire may have been either a careless smoker or a short circuit; the fuse box was reportedly 100 percent overloaded.

One reason for the high loss was the fact that a number of small industries were operating in the mill and, all the machinery was lost, either by water damage or fire.

The fire started under a cutting table and out of reach of heads on an obsolete sprinkler system. More sprinkler heads opened as the heat mounted, reducing the pressure greatly, finally rendering the system ineffective. The fire gained great headway before an alarm was given. The buildings were fully sprinklered, but low public water pressures furnished not over thirteen pounds on the highest sprinklers.

Fire departments responded from Newport, Somerset, Swansea, New Bedford Mass., to assist the Fall River department in averting a conflagration.

Boston Herald-Traveler

MAKING A GOOD JOB OF IT

BY WARREN Y. KIMBALL

What Nozzle Tips Will the Pumper Supply?

LAST month we saw that the tip of the fire nozzle or playpipe serves as a water meter with each size tip, passing a given amount of water at a selected effective working pressure. With a knowledge of how much water a certain size nozzle delivers, we are prepared to select the proper size nozzle to use with pumpers of a given capacity rating. Much of the reason for ineffective fire streams has been a tendency to use nozzle tips larger than can be supplied effectively with the pumper layout employed. Just because a pumper has a certain number of discharge gates does not mean that it can supply that number of lines regardless of the size nozzle tips used, the elevation of the nozzle above the pump, or the length of line employed.

Let us see what we can do with our various standard sizes of pumpers. As there are more 500 gpm pumpers in service than all other sizes put together, we will start with that machine which is designed to give capacity at 120 pounds pump discharge pressure.

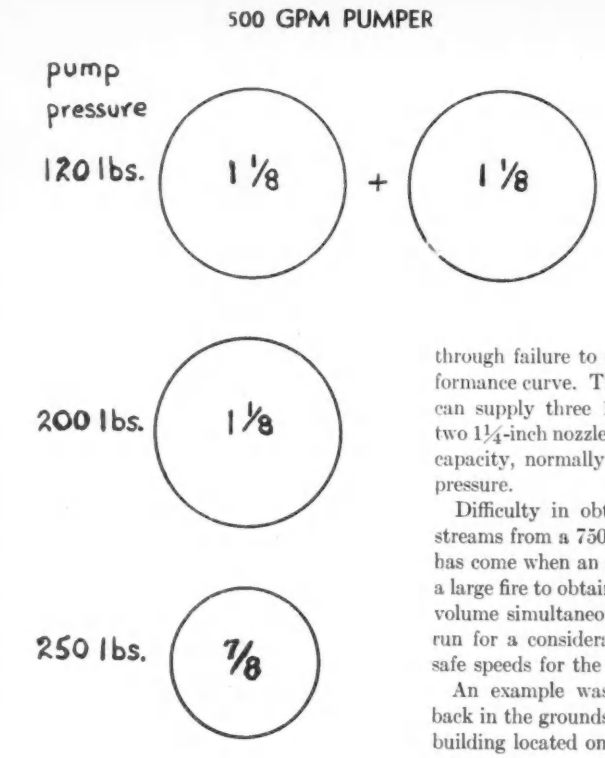
Two 1⅛-inch nozzles discharging at 45 pounds nozzle pressure will take the full output of the 500-gallon machine. If the pump is of centrifugal type, operating at a good hydrant, the nozzles will take care of any additional water that may reasonably be expected from the two lines. When this pumper goes into pressure operation, it becomes a 250 gpm machine at 200 pounds discharge pressure. It is then able to accommodate but one 1⅛-inch tip. Now suppose the line is very long and the fire is atop a high hill so that a pump pressure of 250 pounds is required. At this pressure, the pumper can turn out 167 gallons, a nice stream from a ⅞-inch tip.

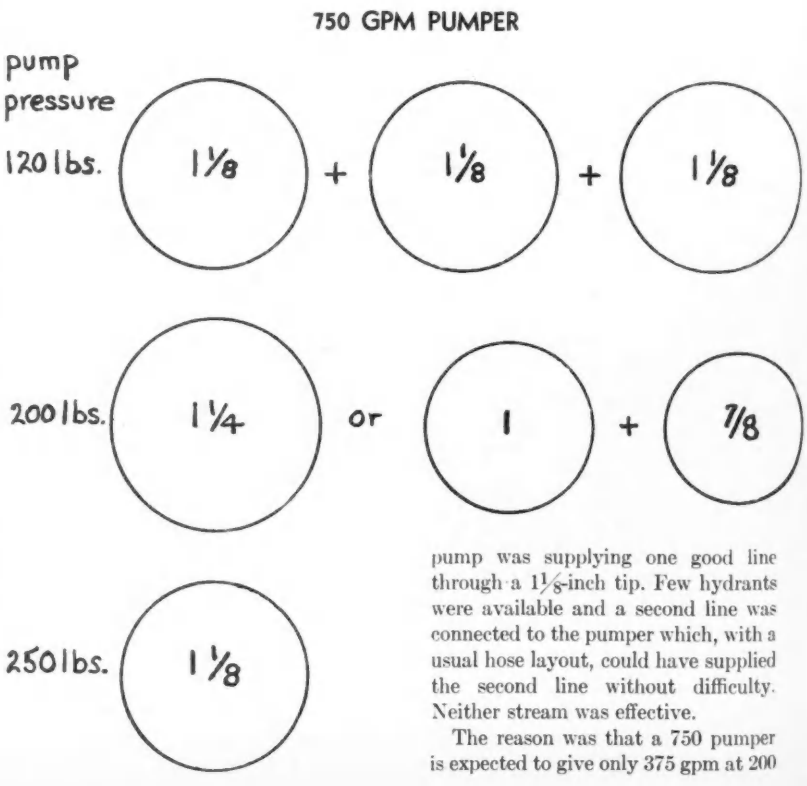
Next we come to the 750 gpm pumper which is the work horse of the average city fire department and outnumbers the 1,000-gallon pumper perhaps two to one. It is important that we know what this pumper can do, as in some fire departments there has been considerable difficulty where the 750 pumper has been badly overloaded through failure to understand its performance curve. The 750 gpm pumper can supply three 1⅛-inch nozzles or two 1¼-inch nozzles when operating at capacity, normally 120 pounds pump pressure.

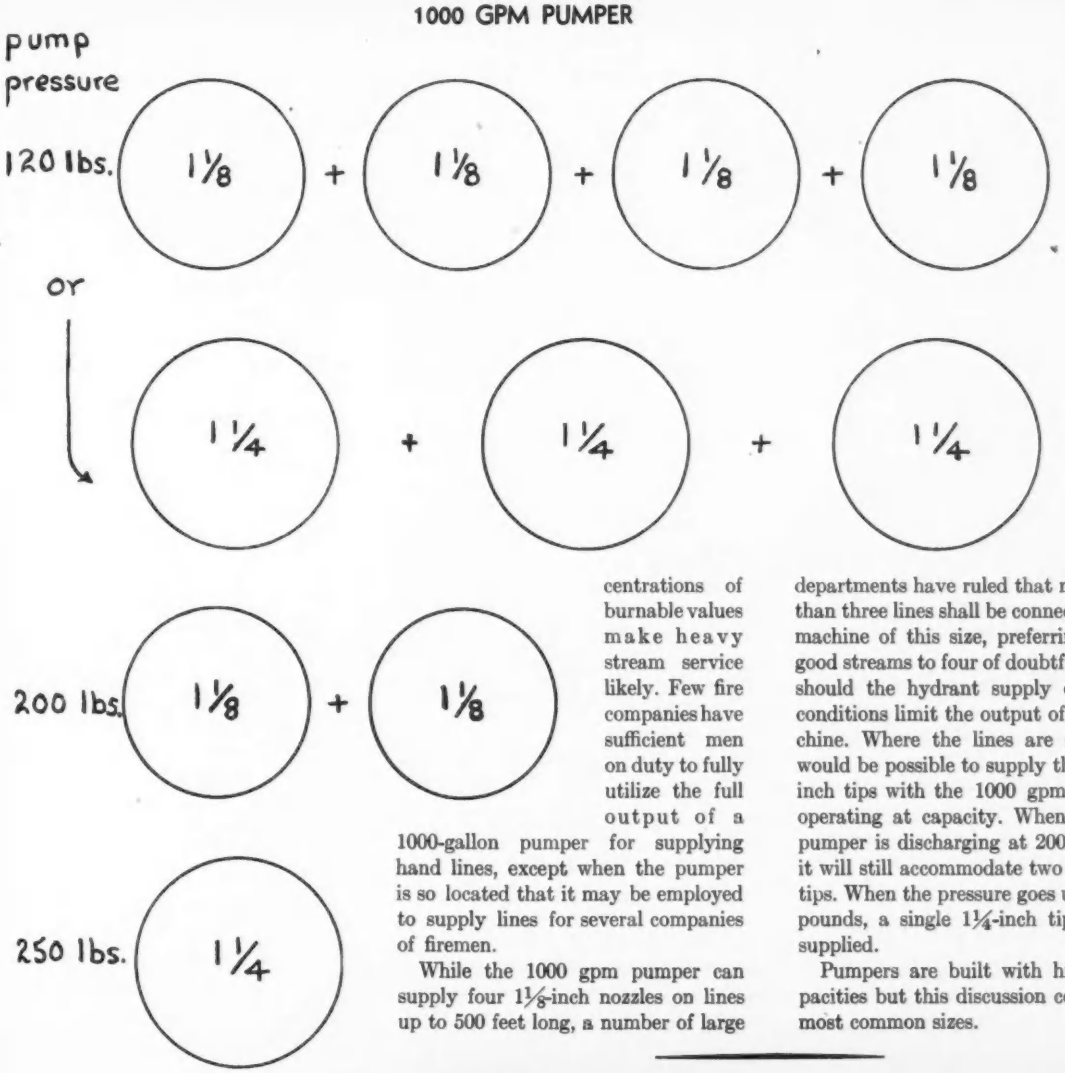
Difficulty in obtaining the desired streams from a 750 pumper inevitably has come when an attempt is made at a large fire to obtain both pressure and volume simultaneously and the pump run for a considerable period beyond safe speeds for the particular unit.

An example was a large fire well back in the grounds of an institutional building located on a hill. The fire involved the upper floors. The 750 gpm pump was supplying one good line through a 1⅛-inch tip. Few hydrants were available and a second line was connected to the pumper which, with a usual hose layout, could have supplied the second line without difficulty. Neither stream was effective.

The reason was that a 750 pumper is expected to give only 375 gpm at 200







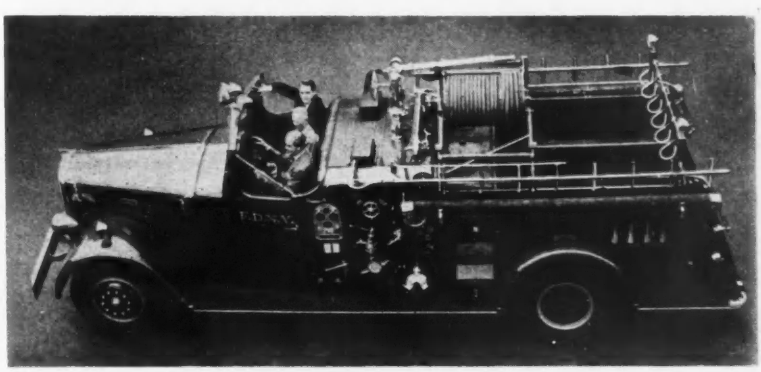
pounds pump pressure. This would supply one good 1¼-inch stream but is hardly enough for two 1-inch tips. At 250 pounds pressure, the 750 pumper can handle only one 1⅛-inch tip.

Some departments are buying 750 gpm pumpers giving capacity at 150 pounds, 70 percent of capacity at 200 pounds, and 50 percent of capacity at 250 pounds. Such machines can supply two good hand lines at high pressures but actually, in performance, are quite similar to a 1000 gpm pumper having a 120-pound capacity rating.

WHILE some even larger or extra-sized pumpers are occasionally purchased, the 1000 gpm pumper is the heavy duty machine for the average department. It is generally found in high hazard areas where large concentrations of burnable values make heavy stream service likely. Few fire companies have sufficient men on duty to fully utilize the full output of a 1000-gallon pumper for supplying hand lines, except when the pumper is so located that it may be employed to supply lines for several companies of firemen.

While the 1000 gpm pumper can supply four 1⅛-inch nozzles on lines up to 500 feet long, a number of large departments have ruled that not more than three lines shall be connected to a machine of this size, preferring three good streams to four of doubtful value, should the hydrant supply or other conditions limit the output of the machine. Where the lines are short, it would be possible to supply three 1¼-inch tips with the 1000 gpm pumper operating at capacity. When the big pumper is discharging at 200 pounds, it will still accommodate two 1⅛-inch tips. When the pressure goes up to 250 pounds, a single 1¼-inch tip can be supplied.

Pumpers are built with higher capacities but this discussion covers the most common sizes.



First of a fleet of twenty new Ward-LaFrance pumpers delivered to the Fire Department of New York City. These pumps are rated to discharge 750 gpm. at 150 pounds. One interesting feature is that the turret nozzle is directly connected to the pump and is thus able to give the desired nozzle pressure to lines from other pumps or hydrants connected through the pump to supply this nozzle. The apparatus is equipped with the familiar subway type of "straps" or hand holds for firemen riding the rear step. It carries the usual two pompier or scaling ladders which on New York City apparatus replace the normal extension and roof ladders. The apparatus also carries a 200-gallon tank and reel of booster hose, a novelty for the FDNY which has always depended upon heavy streams, but made necessary by numerous motor fires on elevated highways and parkways where hydrants are not always within close reach.

Successful Apparatus Replacement Campaign by Resourceful Long Island Volunteers

WHEN the fire losses have been held low and the danger of sweeping fire or conflagration becomes less apparent, convincing argument must be placed before the tax-payer to effect an increase in tax rate to cover the purchase of new fire department equipment, however much it is needed. In many towns, the trucks that the fire department coddled through the war are badly in need of retirement, both for the sake of the citizens and the safety of the firemen.

The Farmingdale, N. Y., Fire Department (NFPA member), however, did plan and carry through a successful campaign for the replacement of four old pieces of equipment with the purchase of four new models. The equipment desired was estimated to cost $45,000.

Chief Charles Lindros, spokesman for the Fire Department's Truck Committee, describes the carefully planned step-by-step campaign:

I READ with interest your editorial (FIREMEN for September, p. 5) regarding the need for information on campaigning for new fire apparatus or stations. We recently put on such a campaign for four new pieces of apparatus and I will outline the plan used by our department.

"1. A request was made to the Board of Fire Commissioners asking that they hold a joint meeting with the village board to hear a proposal from a committee from the fire department regarding the purchase of new apparatus. Approval was granted and the chief was instructed to make the arrangements with the mayor.

"2. The mayor was contacted and approval was granted to hold the joint meeting.

"3. A schedule of apparatus to be replaced and the necessary replacements was prepared and presented at the joint meeting. The matter was discussed fully and the opinion of the village was that the proposal should be presented to the resident taxpayers at a special election. It was further stated that the fire department was to give the proposal the necessary publicity. The village board would conduct the election.

"4. Upon receiving approval, the committee contacted the editor of the Farmingdale *Post*, the local weekly paper, and asked if she would carry our story. She would, provided that we wrote the story.

"5. The first story contained the list of apparatus to be replaced and the proposed new apparatus. The reasons for needing new equipment were also briefly presented.

"6. The next story, printed the following week, carried a 3-column head (see above left). This story presented detailed information on each piece of apparatus that was to be replaced, giving the age of the apparatus and its condition. It also gave detailed information on the new equipment and its advantages.

"7. The next story carried the date that the election was to be held, the requirements of a voter and an invitation to visit the firehouse to see the apparatus.

"8. The following week a story carried the reasons for needing new equipment.

"9. This story, printed two weeks before the election, advised the taxpayers of the additional cost per hundred dollars of assessed valuation. The cost was $0.08 per hundred. The article also discussed the proposed replacements and quoted a section of Bulletin No. 228 of the National Board of Fire Underwriters. Permission was granted by the Board, provided a credit line was given.

"10. The last story before the election carried a 7-column headline reminding the resident taxpayers of the election to be held the following Tuesday. It contained a general review of all the previous articles.

"11. A circular was mailed to all resident taxpayers, advising them to vote and listing the apparatus to be replaced, giving the date the trucks were purchased. It also listed the replacements, the amount of the bond issue and the cost per hundred dollars of assessed valuation. A note at the end of the sheet advised the taxpayer that the circular had been paid for by a group of firemen and taxpayers interested in first class fire protection.

"12. A postcard was sent to every active fireman, reminding him of the election and asking that he vote yes, if a taxpayer, and, if not a taxpayer, that he ask his neighbor to vote yes.

"With the circular and postcard in the mail, the next step was to wait for the election. Upon counting the votes, it was found that 232 taxpayers had voted. Two hundred seven were yes, 19 no, and 6 were void.

"The next step was to thank the

Continued on page 19

THE FARMINGDALE POST, FARMINGDALE, N. Y. THURSDAY, FEBRUARY 28, 1946

Information Regarding New Fire Apparatus Issued By Committee

Public To Vote on Proposed New Fire Equipment Later.

In order that the taxpayers of the Village of Farmingdale

THE FARMINGDALE POST, FARMINGDALE, N. Y. THURSDAY, APRIL 25, 1946

Firemen To Have New Apparatus

207 Vote Yes, on Propsed $45,000 Bond Issue Tuesday Night

Resident taxpayers of the Village of Farmingdale today approved by a 11 to 1 vote the is-

$300,0000 Potato Products Plant Fire

From a report by Chief W. P. Tedlie

THE battle was lost before it began at this fire in a starch and potato factory in Hartland, N. B., on October 24, during which a $300,000 loss occurred.

Fifteen years ago a furniture factory and woodworking plant in the building closed out, and a starch factory began operations, for which a large dry house was built to dry the wet starch. This was attached to the main building by an overhead passage, as the wet starch was placed on racks in the top of the dry house.

Over a period of time an extension was built onto the dry house and the main building enlarged for the purpose of processing potato flour.

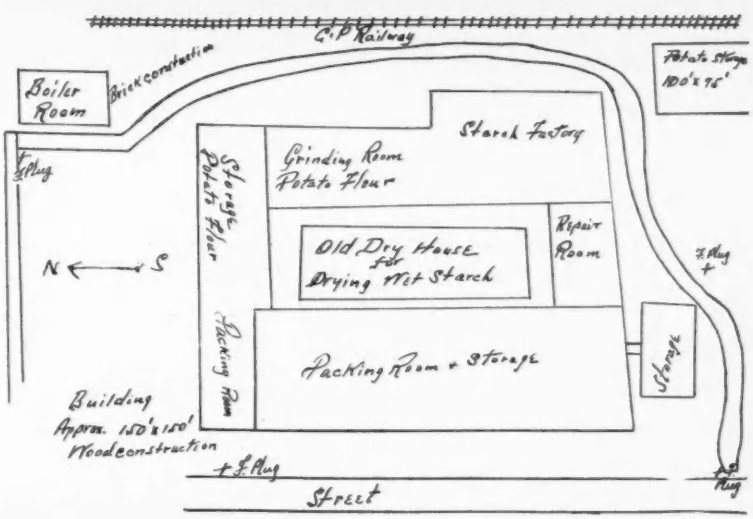
At the beginning of the war when the government wanted dehydrated potatoes, a dehydration plant was put into operation. A building was erected almost completely around the old building and drying house, making it impossible to get at the drying house from the outside. Since the end of the war, the dehydration plant had been idle.

Lately the company had been working on a new method of drying starch and had installed expensive machinery for the manufacture of glucose. Just before the fire, the company had successfully taken off their first commercial batch of glucose and the old drying house was to be torn down.

The fire started at 4 P.M., while the plant was in operation, in the dry house and spread to the remainder of the building. It may have been caused by a spark from faulty wiring igniting starch dust in the old dry house.

The alarm was answered promptly with a hose cart on the job in five minutes. When fire officers arrived they reported that flames were shooting twenty feet high from the ventilators in the dry house. Before the fire was over, the buildings and machinery were a complete loss.

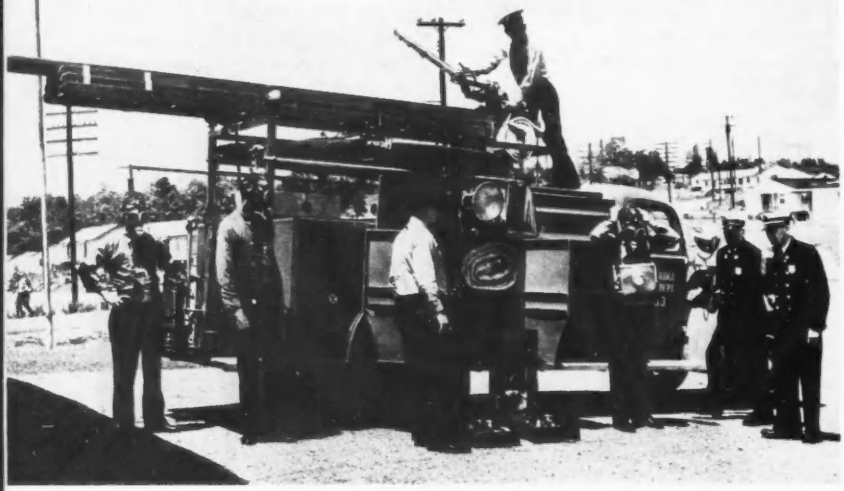
At fire department meetings, it had been decided that if a fire ever did flash through the dry house, it would be impossible to save the plant because of its explosive nature. However, the Hartland firemen were successful in confining the fire to the plant proper. This was done in spite of the water pressure being down because workmen had no time to close three 2-inch mains in the factory.



Provo, Utah, Firemen and Their New Pumper . . .

CHIEF LLOYD DICKSON and his men are very proud of the new American-LaFrance 750 gpm pumper delivered to the Provo City, Utah, Fire Department. This machine is built for both city and rural fires, carries 500 gallons of water, 3 booster reels, 1,400 feet of 2½-inch hose, and 300 feet of 1½-inch hose. The truck is equipped with two-way radio and is powered by a 250 hp motor.

Unique Squad Truck at Oak Ridge



THE fire department from the Manhattan District, Oak Ridge, Tenn., has a squad car that is believed different from any other in service.

This squad truck was converted for squad use from a 500 g.p.m. pumper on a Ford truck chassis. It has a 150-gallon water tank and carries 200 feet of 1-inch booster line.

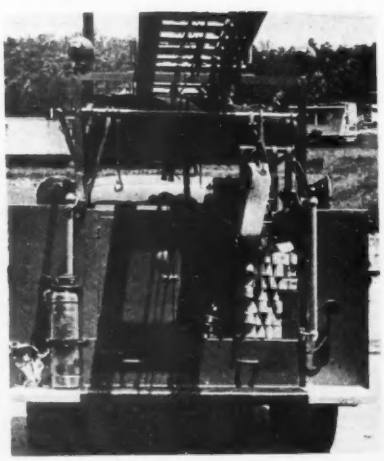
The truck has a divided body and about one-half of the interior has been made into cabinets to carry special service equipment. The balance of the body carries 500 feet of 1½-inch hose.

A Multiversal-type monitor nozzle is mounted on top of the truck and carries sections of 2½-inch hose connected to the inlets so that the full capacity of the pumper may be discharged through this nozzle by merely connecting the hose to the pumper outlets.

Picture at top of page
Demonstrating mask equipment carried in compartments on the Oak Ridge squad car. The man on top of the truck is prepared to operate the monitor nozzle which carries sufficient hose to reach pumper outlets on the truck.

At left
The monitor nozzle in use.

Below
Rear view of the squad truck of the Oak Ridge Fire Department, showing the arrangement of the hose body carrying 500 feet of 1½-inch hose and having numerous compartments for special duty equipment.



Among the rescue equipment carried is a 35-foot ladder, life net, stretchers, collapsible rubber boat, lighting system, acetylene torches, twenty-eight salvage covers, a number of gas masks, protective clothing, first aid kits, and various forcible entry tools.

The idea for this squad car was developed by Fire Commissioner Louis B. Schraffenberger, of the Oak Ridge Fire Department, former director of public safety in Cincinnati. The drawings were made by Deputy Chief Troy Richardson of Oak Ridge Department.

This Oak Ridge company responds to all first alarms and all emergency calls at Oak Ridge.

Christmas Is Coming

Continued from page 6

"We are just as apt to come at midnight as we are at noon. If we come at mealtime, we are sure to spoil your appetite. There is just one thing about us, we never come unless we are invited, and despite all our shortcomings, we are generally welcome when we arrive. The only complaint we hear is that we didn't come sooner.

"We don't like to come! Once or twice some of us have been killed making a call. We are pretty apt to spoil some of our clothes, we often get hurt, and this time of year we are always coming down with a cold after a visit of this sort.

"Sure, you've guessed it by this time. We're the fire department!

"But all joking aside, whose house shall we come to on Christmas day? That dried-to-a-crisp Christmas tree in your parlor, all trimmed up with pretty flammable decorations, is pretty apt to burn if you give it half a chance. Or those worn out Christmas tree lights that never did have an Underwriters' label on them present a serious fire hazard. We doubt if there is anyone foolish enough to put a lighted candle on his Christmas tree, but if there is, we'll plan to come after his catches on fire. Another way, just about as sure to burn down the house, is to pour gasoline on the curtains and light them. It's in the same class with candles on a dry Christmas tree.

"Christmas is the time of year when there is an abundance of rubbish in every home, such as wrappings, empty paper boxes, cotton batting, decorations and such. These make excellent fuses to start fires with, and add greatly to the fire hazard in your home. Make it a habit to burn them up before they

burn you up, putting them in the furnace where they belong.

"Heat-operated toys and new electrical gadgets that do not carry the Underwriters' label are quite apt to be the cause of our making your home a Christmas visit. They are dangerous.

"Christmas fire hazards are not confined to the home. Public places are often just as dangerous, or more so, if proper precautions are not taken. Most every public place is decorated and crowded during the holidays. And fire in any crowded place is liable to cause a panic. Packing material and rubbish should not be allowed to accumulate in stores at this time. Aisles and exits should be kept unobstructed and fire extinguishers ready to operate.

"Schools and churches will be having their usual Christmas celebrations and parties. Let them be happy ones by avoiding the tragedy of fire. Follow the simple safety rules that we have enumerated in this article and that everyone knows so well but sometimes forgets.

"We'll stay away on Christmas day if you do."

Chemistry in Relation to Fire Risk

CHEMISTRY in Relation to Fire Risk and Fire Extinction, by Alec M. Cameron, was prepared primarily for candidates for the examinations of the Institution of Fire Engineers (British), but should be of interest to all those concerned with the subject of chemistry in relation to fire risk and fire extinction.

The twenty-one chapters go into detail on the subject of Combustion; Flame; Gases, six chapters are devoted to this subject; the Production of Coal Gas; Liquids; Mineral and Vegetable Oils; Solids; Spontaneous Ignition; Explosions; Dust; Storage; and Fire Extinction and Fire-proofing.

Copies of *Chemistry* may be obtained from the Pitman Publishing Corp., 2 West 45th Street, New York City, at a cost of $3.50 per copy.

U. S. Fire Losses

THE U. S. fire loss total for the month of September amounted to $40,256,000 according to estimates by the National Board of Fire Underwriters. This loss is 24 percent higher than for the month of September 1945.

New and larger portables with the original Squeez-Grip valve – the Navy Standard – that made C-O-Two world famous in the fire fighting field. These new portables have more punch, weigh less and have a longer effective discharge. The completely insulated swivel tube and discharge horn is an integral part of the Squeez-Grip valve. Easy to operate – one hand control – squeeze to open, release grip to close. C-O-Two kills flammable liquid and electrical fires in seconds with clean, dry, non-damaging, non-freezing and non-deteriorating carbon dioxide gas. C-O-Two will not harm machinery, equipment, material, fabrics, finishes or food. No after-fire-mess to clean up. C-O-Two is modern fire protection. Now you get additional C-O-Two protection at no extra cost.

C-O-Two is our registered trade mark and corporate name. Be safe, specify C-O-Two when ordering.

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C-O-TWO FIRE EQUIPMENT COMPANY

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Sales and Service in the Principal Cities of United States and Canada

AFFILIATED WITH PYRENE MANUFACTURING COMPANY

Mutual Aid in Stanislaus County, California

Reported by Gloria Cannon

A MUTUAL aid fire fighting system, in force in Stanislaus County, California, since 1941, was the determining factor in saving an $80,000 dairy ranch, threatened by a week-end blaze early this fall.

The fire started in the east end of 550 tons of baled hay, stored fourteen bales high in a barn 150 feet long. O. S. Ball, Stanislaus County Fire Warden attributed the large fire to spontaneous ignition caused by wet or damp green thistles baled with the hay.

At the peak of the fire, about eighty workers, mostly volunteers, and five fire trucks from three different districts battled the fire. Firemen remained on the scene thirty-one hours and kept the total loss to $5,400.

The first alarm from the Tular E. Warner ranch, near Hickman, Calif., came to Chief M. A. Rager, of the Waterford-Hickman Fire District, at 10 A.M., September 28. Chief Rager viewed the situation and immediately put in a call which was answered by three county trucks and a fourth truck from the Montpellier Fire District, in addition to the truck from the Waterford-Hickman district.

Confronting the firemen was the difficult problem of obtaining water. The Tuolumne River, a large stream, flowed near the barn but was impractical to pump from, due to a 45-foot drop to water.

An abandoned irrigation canal, however, was within 150 feet of the barn, and water brought into this canal brought the fire under control. The only other source of water used was a 600-gallon trough about 200 feet from the barn.

The procedure employed to pump the water was as follows:

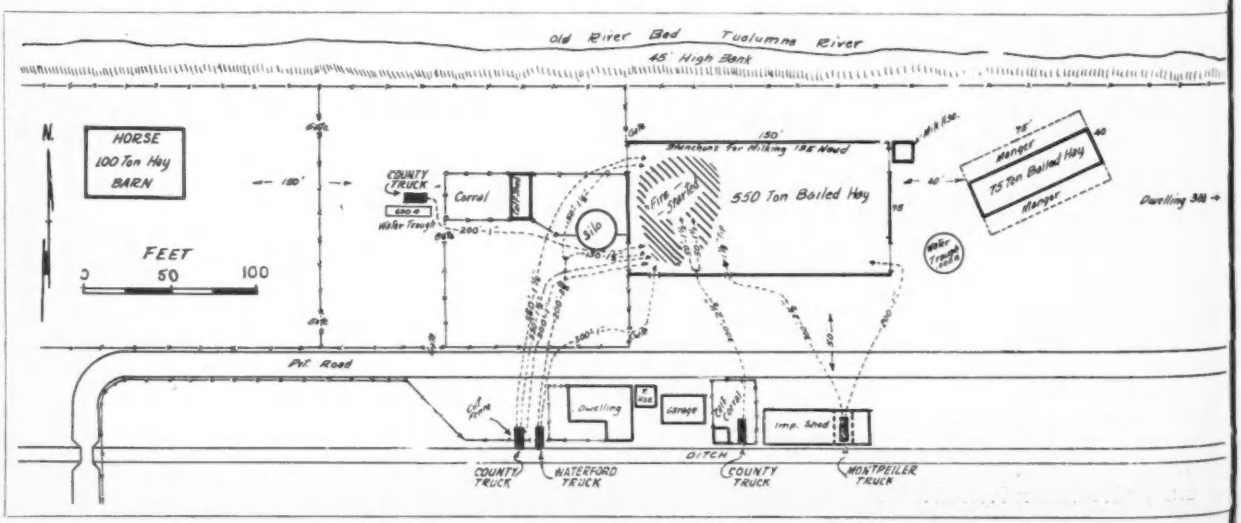
The barn in which the fire occurred. The portion of the roof from which firemen had to remove shingles can be seen behind the silo.

Separating the barn from the irrigation ditch, 150 feet to its south, were the barnyard and a private road, alongside which were three buildings, a calf corral, and an implement shed. The truck from the Montpellier Fire District, running two lines of hose, was placed in the implement shed. This truck ran 300 feet of 2½-inch hose, with a 1⅛-inch tip, into the center of the barn, on the south side, directly on the blaze, and 200 feet of 1-inch booster hose at the far end of the building, also on the south side, where the hay was not aflame.

A county truck, stationed in the calf corral, ran a 300-foot line of 2½-inch hose, which was siamesed inside the barn, on the south side, into two 50-foot lines from 1½-inch hose used directly on the fire.

The truck from the Waterford-Hickman Fire District was placed next to the dwelling after a fence running alongside the canal had been cut. It used one 300-foot line of 1-inch booster hose, also used on the blaze on the south, and a second line of 2½-inch hose, which was siamesed into two 150-foot lines of 1½-inch hose. One stream was used on the fire from the southwest and the other from the northwest.

Another county truck, stationed alongside the Waterford-Hickman truck, used three lines of hose. Two hundred feet of 1-inch booster hose and 500 feet of 1½-inch hose were used on the fire from the southwest. The third



line, 550 feet of 1½-inch hose, was used on the blaze from the northwest.

The third county truck was placed at the 600-gallon water trough, using a 200-foot line of 1-inch booster hose. Altogether 3,000 feet of hose were used, and the fire warden reported 84,000 gallons of water were poured onto the fire during the 2-hour period when it was at its height.

Keeping the building and contents under steady streams of water, firemen worked feverishly removing a total of 120 tons of the hay, eighty of which were aflame. Workers saved 430 tons, which did not have to be removed. The dairy owner's loss, in addition to the 120 tons of hay, included part of the roof of the building which was removed for ventilation purposes and in order to get at the center of the fire. Ranch hands on the Warner place milked forty-five head of cattle in the barn throughout the fire.

COUNTY Fire Warden Ball explained the operation of the mutual aid fire fighting system.

All fire calls go through the main station of the Modesto Fire Department, the county seat, and Chief George Wallace dispatches the trucks through his dispatcher. Each fire district and department in the county has an agreement whereby, if aid is needed, a truck from the district or department nearest the scene is called.

As an example, if Station No. 1 places a call for help, a truck from Station No. 2, nearest Station No. 1, is called. Simultaneously, another truck from Station No. 3 moves up to Station No. 2 and stands ready to replace the truck gone from the latter area. The Stanislaus County trucks, stationed on Highway 99, one mile south of Modesto, are used to cover up.

There are 56 pieces of fire fighting equipment in the county, of which 13 are city-owned and 43 are rural. The county has a total of 579 firemen, but only 33 are paid, the remainder being volunteers. Fire Warden Ball reported that he believed each one of the twenty-eight fire departments in the county were NFPA members.

Rural Protection in Iowa Townships

VOTERS in Bloomington, Fruitland, Sweetland, and Lake Townships of Muscatine County, Iowa, have approved a special tax to maintain a rural fire truck in Muscatine and to pay the salaries of two firemen.

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FROM Midwestern

This Midwestern Combination Suit, made of Vanitex, the modern waterproof fabric, is sold separately or together. The "Mackinaw Coat" is a highly serviceable garment with flexible elastic inner sleeves; adjustable collar strap, detachable wool lining, Midwestern safety snaps, two outside pockets, 6" storm flap and many other good features.

Hundreds in use All over America

Midwestern Bunker Pants with detachable wood lining, safety snap on adjustable belt, wide protecting flap, are sturdily constructed with reinforced crotch for pole sliding. Write today.

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Regular Firemen's Boots, ¾ length, available now. We can also supply REGULAR Firemen's Boots, felt lined, reinforced instep. See your Midwestern Manufacturing Company dealer for prices or write the factory.

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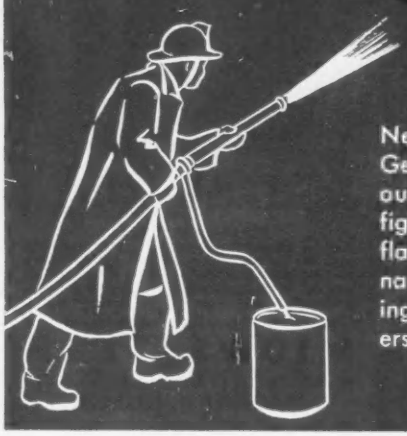
FOAMITE AIRFOAM-GENERATING NOZZLE EQUIPMENT PRODUCES FIRE SMOTHERING



New and novel! The Foamite Airfoam-Generating Nozzle—a strikingly new and out-of-the-ordinary foam-making, fire-fighting nozzle for extinguishing fires in flammable liquids as well as those in ordinary combustibles. It floats with free flowing rapidity on burning liquids and smothers fire by cutting off the oxygen supply.

Write for Foamite Airfoam Illustrated Literature

OUR *2nd Century*

with the new Foamite Airfoam-Generating Nozzle and Airfoam Liquid

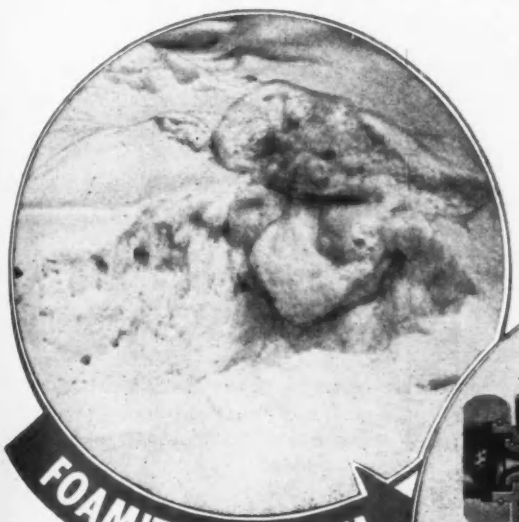
Here's the postwar nozzle * for which you've been waiting, an airfoam-making nozzle of ingenious engineering design that is light in weight, fast in action, easy to work, and efficient in service.

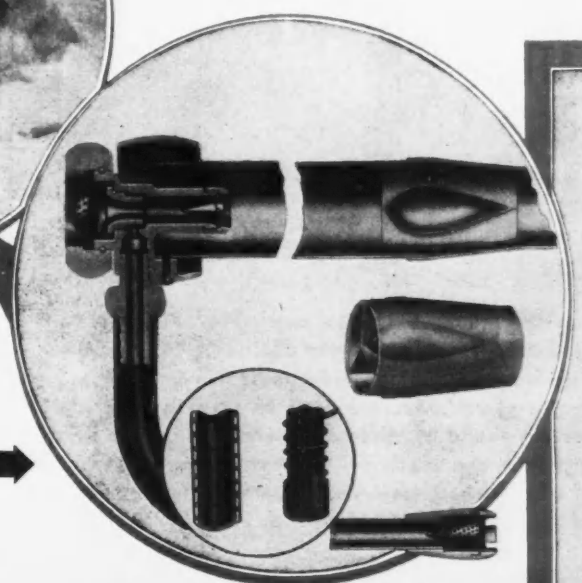
This Foamite Airfoam-Generating Nozzle mechanically creates Airfoam thru a scientific mixing of water, air and Foamite Airfoam Liquid within the Nozzle, and discharges the combined ingredients as Foamite Airfoam thru the nozzle tip.

Foamite Airfoam Liquid is a highly concentrated proteinaceous material of vegetable origin. It is protected against freezing to 15°F; will operate with fresh or salt water; with hot or cold water; will not ferment or mold; is not susceptible to decomposition from bacteria; is non-corrosive to metals.

The Foamite Airfoam-Generating Nozzle is furnished in two capacities, Models 300 and 600 producing at 100 psi operating pressure, approximately 300 and 600 gallons of Foamite Airfoam respectively.

*Patents pending on this new Foamite Airfoam-Generating Nozzle.





Shown is sectional view of Model 600 Foamite Airfoam-Generating Nozzle. It mechanically creates Foamite Airfoam thru a scientific mixing of water, air, and Foamite Airfoam Liquid. Phantom view shows specially designed "tear drop" obstruction for giving stream equal velocity on leaving tip. Note wire-reinforced pick-up hose construction.

Foamite Airfoam-Generating Nozzles, Models 600 and 300.

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RESUSCITATOR
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ASPIRATOR

There are important reasons why so many fire departments, hospitals and industrials have purchased additional E & J Resuscitators after successful experience with their first unit. These automatic breathing machines are built to include vital life saving features not found in other equipment. A comparison of other equipment and methods by your department will quickly reveal why the vast majority of fire departments have chosen the E & J. We invite your thorough investigation.

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Keeping Complete Fire Records

Digested from the "Iowa Fire School News Letter" for October.

THE importance of keeping adequate and complete fire records is recognized as being important, but many times the easiest course is taken and the record is put off until a complete story on the fire cannot be recalled.

Chief J. B. Willey, of Mount Ayr, Iowa, got in a disagreement over the time a child was born ten years ago. The doctor remembered that the fire siren blew just as he finished tying the knot, so Chief Willey consulted his records and settled the argument by telling the time of night the siren blew.

This is an unusual case but questions of many kinds can arise. In the course of an arson investigation, or in settling a loss claim, it is important to be able to reconstruct the fire from complete and correct records. These may include step-by-step diagrams of the fire fighting so that firemen may profit by any mistakes that might have been made.

District of Columbia Firemen Have New Training Text

CHIEF CLEMENT MURPHY, District of Columbia Fire Department, has approved a new pump manual for Washington firemen. This manual, prepared by a pump school committee under Capt. A. M. Grunwell, contains more than 100 pages of instructional material under the following chapters:

1. Principles of Pumping; 2. Fire Pumps; 3. Pump Accessories; 4. Power Development and Transmission; 5. Fire Department Hydraulics; and 6. Fire Department Operation.

Massachusetts Firemen Win 48-Hour Week

FIREMEN of seven out of eight Massachusetts cities in which the question appeared as a referendum on the November 5 ballot, were granted a 48-hour work week by an overwhelming margin. The voters of only one city were unfavorable toward the firemen's request. The public attitude was summed up by a Boston radio commentator who stated that the old long work week for firemen was outmoded and was "a condition close to slavery."

The cities of Attleboro, Boston, Lowell, Malden, New Bedford, Springfield, and Waltham voted for the

shorter week. Only in Holyoke was there taxpayers' opposition.

In Boston where the measure was passed by a 9 to 1 margin, Mayor James M. Curley announced that beds and kitchen facilities would be removed from the fire stations and that work would be found for the firemen for each 8-hour shift.

A Volunteer Fireman's Wife Speaks

FIREMEN might be interested in suggesting to their wives that they read the thrilling adventures of "A Volunteer Fireman's Wife," in the November issue of *Today's Woman* magazine. The article was written by Mrs. Myrtle Mann, wife of the secretary of the Devils Lake, N. D., Volunteer Fire Department (NFPA member). Mrs. Mann probably echoes the thoughts of firemen's wives all over the country as she writes of the trials and tribulations of being a volunteer fireman's wife, until she gets her chance to fight a fire by her husband's side.

General Manager Percy Bugbee wrote a statement on the contribution of the country's volunteer fire departments which appears with the article.

Apparatus Replacement Campaign by Resourceful R. I. Volunteers

Continued from page 10

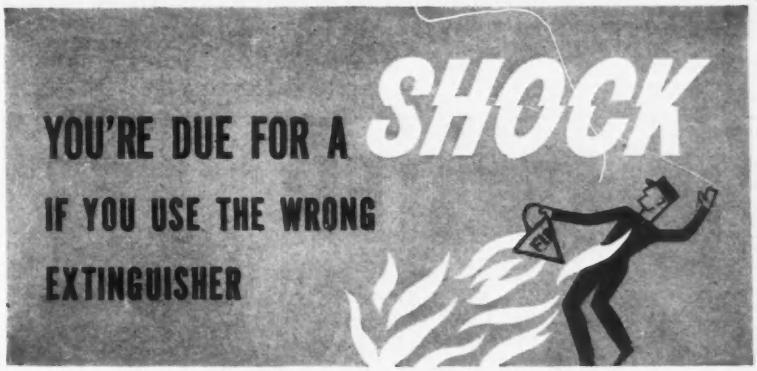
taxpayers. This was done in an article in the following week's paper.

"It is necessary in conducting this type of campaign to have the complete cooperation of the editor of the local paper. In this we were very fortunate.

"It is also important that your articles contain facts and do not contradict the previous article. In order to overcome this possibility, a scrapbook was kept. The carbon copy of the typewritten article submitted to the editor was placed in this book along with the printed story.

"Cooperation with the village officials is also important. The village clerk can be a great help, for he has the amount of assessed valuation, the current tax rate and the list of resident taxpayers. Without this list of taxpayers, we would have been unable to direct our circular to each taxpayer personally."

Since winning the election, the Farmingdale Fire Department has placed orders for a 750 gpm pumper and a 65-foot service aerial.



The SHOCK will be more than a figure of speech if you try to put out an oil, gas, paint, solvent or electric fire with water or the wrong kind of extinguisher; the fire will spread —roar back at you—get beyond control quickly. And if it's an electric fire you may be severely injured by current traveling up the stream.

A Pyrene Vaporizing Liquid extinguisher meets requirements for such fire hazards; heavy, oxygen-blanketing vapors smother the blaze. It's a nonconductor—can be safely used on electric fires. It does not harm delicate instruments and motors. For incipient fires use a one quart size. For larger risks the same quick, safe extinguishing agent is available in two qt. and one gal. sizes. In these larger sizes, liquid is kept under pressure, requiring no pumping.

The Pyrene Foam extinguisher fills the need for a portable model capable of putting out both Class A and B fires . . . smothers oil, paint, solvent and other flammable liquids with a blanket of oxygen-excluding foam.

The Pyrene Soda-Acid and the cartridge-operated Pyrene Water-Type extinguishers are approved for Class A fires where cooling and quenching are of first importance. They are ideal for offices and stores.

Consult your nearest Pyrene jobber or write for information.

Pyrene

Pyrene Manufacturing Company
NEWARK 8 NEW JERSEY
Affiliated with the C-O-Two Fire Equipment Co.

Remember This!

The Darley Hi-Lift is a turbine driven centrifugal pump, not to be confused with jet devices, which cannot equal the Hi-Lift for VOLUME of water delivered.

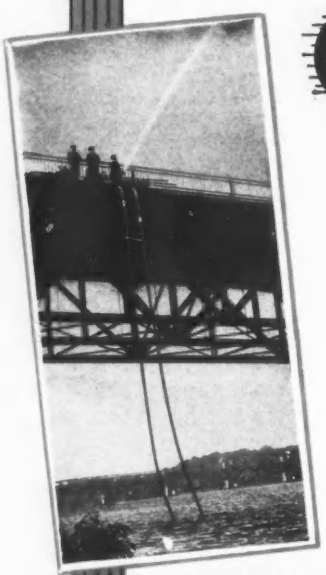
Before you buy check and compare VOLUME.

Modernize Your Dept. with A HI-LIFT

LIFTS WATER 100 FT.

$165 NOT INCLUDING SIAMESE

CHAMPION HI-LIFT SUCTION BOOSTER



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228 GALLONS PER MINUTE FROM A 57 FOOT LIFT

208 GPM WITH THE TRUCK 73 FEET ABOVE AND 165 FEET DISTANT FROM THE WATER

" . . . if it was not for the HI-LIFT the bridge would have gone and they could not let trains pass for weeks."

CHIEF BRIDGES, KENT, WASH.

CITY OF KENT
WASHINGTON

May 14, 1946

W. S. Darley & Co.
Chicago 12, Illinois

Gentlemen:

May 11th, we had a fire on a Milwaukee Railroad bridge, 1,000 feet long. The trestle was constructed of heavy timbers and well creosoted. The river was near, and the water 35 feet down from the bank, and fifty feet away. We tossed in our Hi-Lift Suction Booster, and pumped water for two hours steady and saved the 1,000-foot trestle and bridge across the river. The Milwaukee office at Seattle called in four other fire departments and all they could do was look at the fire fighting that was being done by our department because we were the only ones that owned a Champion Hi-Lift Suction Booster. The General Manager, the Superintendent and all the high officials of the Milwaukee Railroad were at this fire and they sure were interested to see that little pump throw so much water. If it hadn't been for the Hi-Lift the bridge would have gone and they could not let trains pass for weeks. Once more we made the Seattle papers on the front page with your Champion Hi-Lift. They replaced three pilings and the trains resumed going over the bridge. There was smoke going up in the sky for 200 feet and flames the same.

Yours truly,

Chas. Bridges, Fire Chief.

W. S. DARLEY & CO.

ESTABLISHED 1908
CHICAGO 12, ILL.

1947 Electrical Code

THE National Electrical Code sponsored by NFPA provides for the practical safeguarding of persons and of buildings and their contents from electrical hazards. The new 1947 edition now becomes Volume V of the National Fire Codes. Added features are an index to all NFPA publications relating to various sections of the Code and an advertising section limited to electrical products listed by Underwriters Laboratories, Inc., or approved by Factory Mutual Laboratories.

Presented for the first time in convenient desk reference size, 6 x 9 inches, this 408-page volume is uniform in size and format with the other volumes of the National Fire Codes. Price $2.00. Copies may be obtained from the NFPA.

Arson Detection Manual

A NEW NFPA manual, *The Fireman's Responsibility in Arson Detection*, prepared by the Committee on Firemen's Training, is now available. Price: $0.50 single copies.

Fire and the Air War

FIRE AND THE AIR WAR is a distinguished addition to the now-it-can-be-told books of World War II—told in a factual but interesting style by experts who scientifically planned the reduction of enemy cities by fire.

The volume is edited by NFPA Chief Engineer Horatio Bond and contributors include Eric L. Bird, editor of the Journal of the Royal Institute of British Architects; Commander Orville J. Emory, USNR; Commander Sir Aylmer Firebrace, Chief of Fire Staff, British National Fire Service; James K. McElroy, NFPA staff, former chief of the Fire Analysis Unit, Research and Experiments Department, British Ministry of Home Security; Anthony J. Mullaney, Chief Fire Marshal, Chicago Fire Department; Robert Nathans, vice-president of Safety Research Institute, Inc., and former executive officer and target specialist, Twentieth Air Force; and Major Forrest J. Sanborn, AUS, Physical Damage Division, U. S. Strategic Bombing Survey.

The book also includes the complete text of the official report of the U. S. Strategic Bombing Survey on the atomic bombings of Hiroshima and Nagasaki. *Fire and the Air War* contains 276 pages, is illustrated by 161 pictures and maps. It may be ordered from the NFPA at $4 per copy.

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1-INCH SOLID STREAM

AND

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It's Five Ways Better

Barton-American's Gear Driven Front Mounted Centrifugal Fire Pump can be installed in a few hours time.

A Boar For Work

Delivers 60–90 GPM at 600 lbs. pressure with FOG nozzle and 200 GPM through 2½" line with 1" SOLID STREAM nozzle . . . at engine speeds equal to only 40 mph. Front mounted construction leaves room for 1,000 feet of 2½" hose plus 500 gallon booster tank. Pumps dirty water with minimum loss of efficiency.

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A coating of StrangleAIR lasts for hours on any surface, horizontal or vertical. Fire cannot withstand its smothering effect. StrangleAir is clean, white, non-toxic and will not injure paint, woodwork, furniture or carpet. Eliminates flashbacks and prevents formation of noxious fumes.

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are specially designed for fast, effective action with foam. Manufactured in standard sizes from 2½ GPM to 250 GPM and available through fire appliance supply houses.

For full information, request Illustrated Bulletin 125

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EAST READING, PA.

SAVE VALUABLE PLANTS & MATERIALS

Fyr-Fyter equipment has proven its value in preventing small fires from becoming disastrous through the loss of life and property. Recent catastrophic fires with terrific loss of life emphasize the urgent need of fire protection. A complete line of UNDERWRITERS LABORATORIES Labeled FIRE EXTINGUISHERS.

HELP SAVE LIVES AND PROPERTY

Get Fyr-Fyters for safety's sake. We advise and serve manufacturing plants, public institutions, etc., immediately. Write us today regarding Fyr-Fyter equipment for your own protection.

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The all-climate, dependable mechanical foam extinguisher » » » *It flows—covers—seals—extinguishes* » » » Highly effective on oil and gasoline fires—on Class A fires » » » Use with any kind of water—at any temperature—in all makes of equipment.

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FIRE OUT... Stays OUT!

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Casting a HALE IMPELLER

The Impeller is the heart of the Centrifugal Pump. Hale Impellers are cast in our own foundry . . . finished and polished with exacting care.

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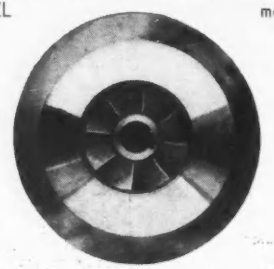


and painstakingly balanced like a fly-wheel, thus assuring correct running balance. This thoroughness is typical of the design and manufacture of all types of Hale Fire Pumps.

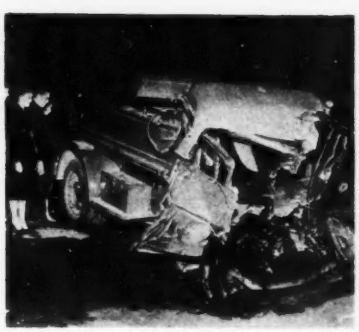
● Write today for up-to-date information on Hale Fire Pumps, built in all standard capacities.

HALE FIRE PUMP COMPANY
CONSHOHOCKEN, PA.

Huntsville, Ala., Firemen Salvage Cotton in Fire

FIRE CHIEF R. M. MILAM (NFPA member) and his Huntsville, Ala., Fire Department, turned in an outstanding performance at midnight on October 27 when fire swept a new, and as yet unsprinklered, cotton shed, 216 feet long, and communicated through unprotected door openings to two other warehouse sections. The new warehouse contained 2,500 bales of cotton and was completely in flames when the fire department arrived. They did excellent work in preventing fire from communicating to adjoining compartments through unprotected openings, despite collapse of portions of fire wall parapets which exposed cotton in the adjoining compartments and broke sprinkler pipes.

The Huntsville firemen were not content to turn in an outstanding job of fire fighting but, according to the Cotton Engineering and Inspection Service, are to be credited with saving large values through excellent salvage work after the fire. The Inspection Service report states: "We wish to compliment Fire Chief Milam and his department for their excellent work, which will result in considerable salvage above that of similar fires. His cooperation in keeping the new 65-foot aerial tower apparatus in service continuously for more than 60 hours, playing large hose streams over masses of burning cotton, in addition to keeping his men on duty using other hand hose lines, greatly assisting the Underwriters Salvage Company, is worthy of notice."



Press Association, Inc.

Speed Safely! Unless the fireman reaches the fire in good condition, he's of no use to the home- or shop-owner whose property is being threatened.

The driver of the fire truck at Palatine, Ohio, above was killed when he was dashing to a fire alarm and failed to stop at a railroad crossing.

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From the compact Model 2½ . . .

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every Kidde Portable works the same fast, simple way . . .

AIM AT THE FIRE — PULL THE TRIGGER!

With *any* size *Kidde* Carbon Dioxide Portable, the *natural* way to fight a fire is the *right* way too! Simply aim the nozzle at the flames — then press the trigger. It's just as easy as that.

The dry, clean carbon dioxide from *Kidde* Portable Extinguishers is deadly to fires in flammable liquids or electrical equipment—but harmless to everything else. No danger of shock when used on electrical equipment. No after-fire mess to clean up.

Carbon dioxide capacities: 2½, 5, 10, 15 and 20 pounds. Write for full information.

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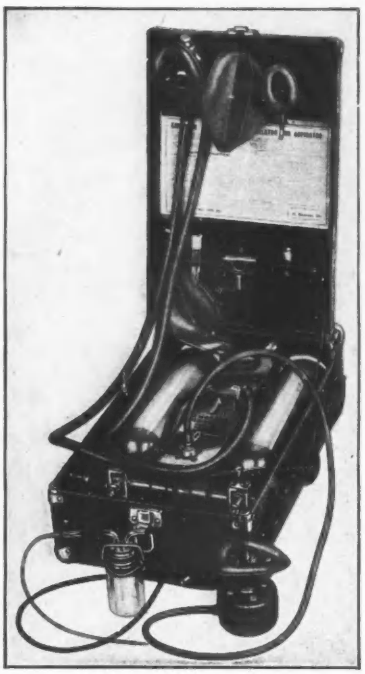
Play safe with the



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There is no excuse for anything but the best in fighting fire and death. High on your list of "musts" is the finest resuscitator money can buy — Emerson.

•

Write for literature or a demonstration

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Photo by Ed Wergeles

WOMAN FIRE PROTECTION ENGINEER IN BROADCAST

A feature broadcast in connection with Fire Prevention Week was Alma Kitchell's program, originating in New York, on which Dorothy Downs, the country's foremost woman fire protection engineer and assistant chief engineer of the Firemen's Mutual Fire Insurance Company in Providence, R. I., was guest expert. Miss Kitchell is widely known as woman's commentator for Station WJZ, New York.

Lake Shore Volunteer Fire Co., N. Y., First Aid Unit

THE Lake Shore Volunteer Fire Company, Inc., of Hamburg, N. Y., was organized some nine years ago and now furnishes protection to 3,000 people. The first aid unit became very active during the war, as fire department personnel were made part of the civilian defense program.

Soon after the war started a panel-type sedan truck was presented to the company by one of the members and converted into an ambulance. Under gas rationing, the community came to depend on the Lake Shore First Aid Unit in every emergency.

As to the future plans of the Lake Shore Company, Secretary Montie Lewis wrote, "With the anticipated postwar traffic on both highways (Hamburg is 10 miles west of Buffalo on New York State Route 5 and adjacent to National Route 20) and probable service that would be rendered to others than the residents of our district, the company felt the need of a larger ambulance and more equipment. We have recently purchased a larger first aid unit (*pictured below*) which was altered to carry four persons, instead of one. Additional stretchers were purchased, and in the last year a new inhalator with all attachments, including a baby mask, was purchased to facilitate in first aid activities.

"In the two years ending last August, the first aid unit answered 93 first aid calls, serving 129 persons with aid and hospital transportation to Buffalo hospitals, many of whom were involved in auto accidents. We now have three members who are qualified by the American Red Cross to act as instructors in first aid training."

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"And now we come to the use of the razor strap—standard equipment in the handling of false alarms!"

National Fire Protection Association, International

Associate Membership

VOLUNTEER FIRE COMPANY SECTION ($10 annual dues) Eligible:

(1) all bona fide volunteer fire organizations in any community.

(2) all fire departments and companies in communities of less than 25,000 population.

(3) all industrial fire brigades.

Member volunteer fire companies receive ten copies of FIREMEN magazine each month, mailed to the homes of individual firemen. Beyond the ten, additional copies of FIREMEN cost $1 per year.

Volunteer Fire Company Section members, receive, at their headquarters, one copy of all publications sent to NFPA associate members.

ASSOCIATE MEMBERSHIP ($10 annual dues) Eligible: Individual fire department officers, firemen, and others interested in fire safety. NFPA associate members in the fire service receive: one copy of FIREMEN magazine monthly, the NFPA **Quarterly**, the monthly **News Letter**, technical standards, popular bulletins and posters.

All associate members have one vote in Association affairs.

New members of the Volunteer Fire Company Section are:

Bondsville Fire Dept., Bondsville, Mass.

Cuba Fire Dept., Cuba, N. Y.

Delaview Volunteer Fire Department, Delair, N. J.

East Prospect Fire Co., East Prospect, Pa.

Flushing Fire Dept., Flushing, Mich.

Greenwood Volunteer Fire Dept., Greenwood, Ind.

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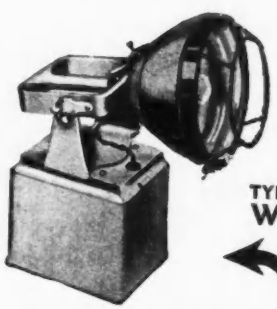

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FIRE SPECIALTIES DIVISION

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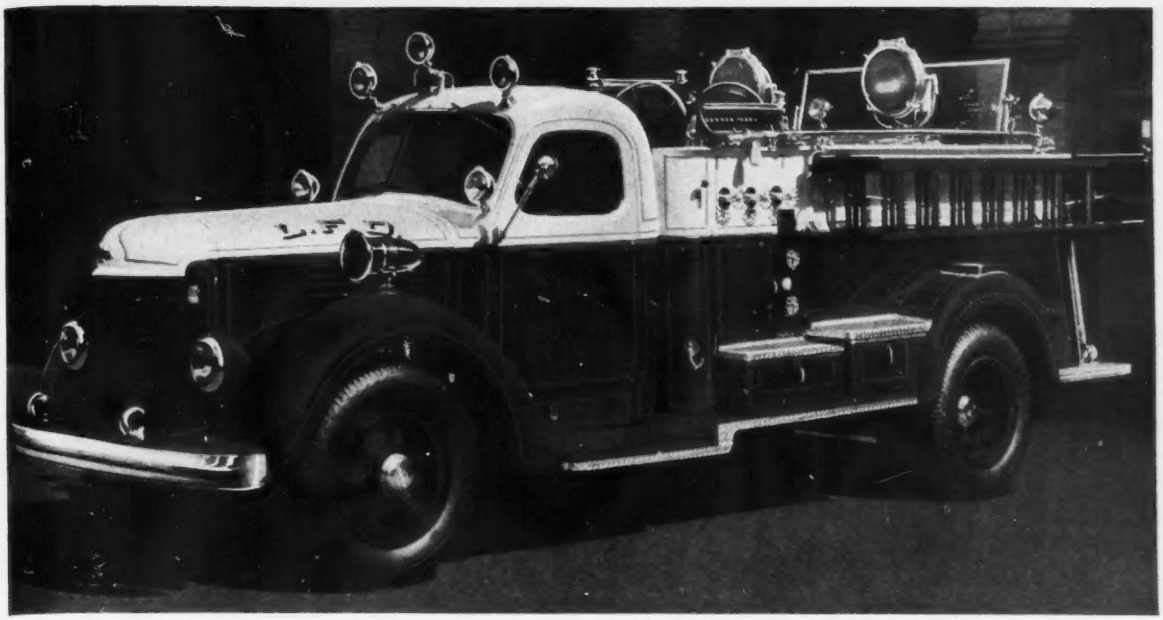

LANSING'S HOTTEST CREW MANS HIGH-PRESSURE UNIT

Special Bean Fog Fighter Will Answer All Calls A new idea in city fire-fighting is being used in Lansing, capitol of Michigan. It is expected this new high-pressure unit will become a model for other fire departments throughout the nation.

The "new idea" is a specially-designed John Bean High-Pressure Fog Fire Fighter, which is manned by Lansing's "hottest" crew of smoke eaters and answers *all* calls in this city of 100,000.

Newspapers Laud Unit The new unit was received by Lansing at ceremonies attended by the Mayor and fire officials. Commenting on the event, Lansing newspapers reported the Bean high-pressure unit has several features that make it a most important piece of equipment.

Most important of these is high-pressure. Lansing firemen now can fight fires faster with their new Bean equipment. They *blast*, *cool* and *smother* the flame in double-quick time and with low water damage.

Two-way Radio Included The unit is complete in itself, can fight fires regardless of water supply. It carries a 430-gallon tank, a 60-gallon per minute pump, 850 lbs. pump pressure with 650 lbs. gun pressure, and two hose reels with 250 feet of hose on each, and goes into action instantly upon arrival at the fire.

In addition, the unit carries two patented Bean high-pressure fog fire guns, a two-way radio, a light plant for two large flood lights, special safety running lights and two special sirens. It is the first piece of high-pressure fire equipment in service with a two-way radio.

Investigate FMC for *your* department. Learn the advantages of the John Bean High-Pressure Fog Fire Fighter. Units already in service are daily proving their worth beyond all expectations.

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FMC *Original* **HIGH-PRESSURE FOG FIRE FIGHTER**

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● FIRE ALARM . . . rated third in importance of the active fire defenses is seriously deficient in most municipalities and when fire occurs — some 700,000 times annually in the United States and Canada — alarms are frequently delayed, unnecessary fire losses occur and — if nothing is done about it — losses continue to waste the resources of the communities and insurance companies.

● YOU . . . as a citizen . . . have a right to study the fire defenses of your community and if you find them deficient to urge, in the interest of public safety, that adequate provision for their improvement be included in the Post-War plans.

If the data on "Fire Alarm" is not available locally, write us; we will supply the information and tell you how to check it.

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